

REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendment and following remarks.

The Applicant appreciates the allowance of claims 7-9, and the indication of allowable subject matter in claims 4-6.

By the foregoing amendment, claims 1-4, 6, 7 and 15-17 have been amended. It is noted that claim 7 has been amended to correct a typographical error, and is believed to remain allowable. Claims 10-14 were previously withdrawn from consideration. Thus, claims 1-9 and 15-17 are currently pending in the application, with claims 1-7 and 15-17 subject to examination.

In the Office Action mailed July 12, 2005, the Examiner rejected claims 1-3 and 15-17 under 35 U.S.C. § 103(a) as being unpatentable over Applicant's admitted prior art (AAPA) in view of U.S. Patent No. 6,452,634 to Ishigami et al. (hereinafter, "Ishigami"). It is noted that claims 1-3 and 15-17 have been amended. To the extent that the rejection remains applicable to the claims currently pending, the Applicant hereby traverses the rejection, as follows.

In the outstanding Office Action, the Examiner asserts that Ishigami discloses a 3-phase driving method. However, Ishigami clearly discloses inputting electrode pairs of each half bit with the same drive pulse to operate it by a two-phase complementary drive in a normal operation, and in an N-time speed operation, inputting the electrode pairs of N bits with N pairs of complementary drive pulses to operate them by a 2N-phase complementary drive. See Ishigami, Abstract, for example. Since Ishigami

teaches only two-phase complimentary or 2N-phase complimentary driving, Ishigami does not teach three phase driving.

The Applicant submits that neither the AAPA nor Ishigami, alone or combined, discloses or suggests at least the features of a first pulse signal generator circuit for applying either a first pulse signal train for n-phase (n being an odd integer larger than 1) driving of charges in said charge transfer path to said charge transfer electrodes or a second pulse signal train for (n + 1)-phase (n being an even integer) driving of charges in said charge transfer path to said charge transfer electrodes, as recited in claim 1, as amended.

In addition, the Applicant submits that neither the AAPA nor Ishigami, alone or combined, discloses or suggests at least the features of a second pulse signal generator circuit for applying either a first pulse signal train for n-phase driving (n being an odd integer larger than 1) of charges in said charge transfer path to said charge transfer electrodes or a third pulse signal train for (n x m)-phase driving ((n x m) [[m]] being an odd integer larger than 1) of charges in said charge transfer path to said charge transfer electrodes, as recited in claim 2, as amended.

Further, the Applicant submits that neither the AAPA nor Ishigami, alone or combined, discloses or suggests at least the features of a third pulse signal generator circuit for applying either a fourth pulse signal train of two-phase for 2-phase non-complementary driving of charges in said charge transfer path to two charge transfer electrode pairs or a fifth pulse signal train for 2k-phase non-complementary driving or more of charges in said charge transfer path to the charge transfer electrode pairs, as recited in claim 3, as amended.

For at least these reasons, the Applicant submits that claim 1-3 are allowable over the cited art of record. As claims 1-3 are allowable, the Applicant submits that claims 15-17, which depend from allowable claims 1-3, respectively, are likewise allowable.

In addition, with regard to each of the rejections under §103 in the Office Action, it is also respectfully submitted that the Examiner has not yet set forth a *prima facie* case of obviousness. The PTO has the burden under §103 to establish a *prima facie* case of obviousness. In re Fine, 5 U.S.P.Q.2nd 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002).

In the Office Action, the Examiner merely states that the motivation for combining the references is found in certain advantages stated by the Examiner (see, e.g., the Office Action at page 3, first full paragraph; and the second full paragraph of each of

pages 4 and 5, for example). The Examiner, however, indicates nothing from within the applied references to evidence the desirability of this combination. This is an insufficient showing of motivation.

CONCLUSION

For all of the above reasons, it is respectfully submitted that the claims now pending patentability distinguish the present invention from the cited references. Accordingly, reconsideration and withdrawal of the outstanding rejection and an issuance of a Notice of Allowance are earnestly solicited.

Should the Examiner determine that any further action is necessary to place this application into better form, the Examiner is encouraged to telephone the undersigned representative at the number listed below.

In the event this paper is not considered to be timely filed, the Applicant hereby petitions for an appropriate extension of time. The Commissioner is hereby authorized to charge any fee deficiency or credit any overpayment associated with this communication to Deposit Account No. 01-2300, referencing docket number **107317- 00017.**

Respectfully submitted,



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